

WHAT IS CLAIMED IS:

1. A method for managing a transportation system, said method comprising the steps of:

collecting at least one set of transportation data from at least one sub-system;

comparing the at least one set of collected transportation data set to at least one standard transportation data; and

generating at least one problem area data set based upon the comparison of the collected and standard data.

10 2. A method in accordance with Claim 1 wherein the at least one sub-system includes at least one of a wayside sub-system, a locomotive sub-system, a railcar sub-system, a yard sub-system, a schedule sub-system, a monitoring and diagnostic sub-system and a management making sub-system.

15 3. A method in accordance with Claim 1 wherein collecting at least one set of transportation data from at least one sub-system comprises the step of collecting real-time data from at least one sub-system.

4. A method in accordance with Claim 3 wherein the transportation system includes at least one vehicle, said method further comprising the step of altering a performance of the vehicle based upon the problem area data set.

20 5. A method in accordance with Claim 4 wherein said step of altering the performance of the vehicle based upon the problem area data set comprises the step of continuously altering the performance of the vehicle based upon the real-time data.

25 6. A method in accordance with Claim 1 further comprising the step of identifying at least one source of delay.

7. A method in accordance with Claim 6 wherein said step of identifying at least one source of delay comprises the step of identifying a defined quantity of largest source of delays.

5 8. A method in accordance with Claim 1 wherein said step of identifying a defined quantity of largest source of delays comprises the step of a user selecting a number of largest source of delays.

31 9. A method in accordance with Claim 1 further comprising the steps of determining a predicted a vehicle delay based upon the problem area data.

10 10. A method in accordance with Claim 1 wherein said step of collecting at least one set of transportation data from at least one sub-system comprises the step of transmitting data between at least one sub-system and a data center utilizing at least one communication link.

11. A management system for managing a transportation system comprising:

16 at least one sub-system for collecting at least one set of transportation data;
Sue A2 a sub-system for comparing the at least one set of collected transportation data set to at least one standard transportation data; and
a sub-system for generating at least one problem area data set based upon the comparison of the collected and standard data.

20 12. A management system in accordance with Claim 11 wherein said at least one sub-system includes at least one of a wayside sub-system, a locomotive sub-system, a railcar sub-system, a yard sub-system, a schedule sub-system, a monitoring and diagnostic sub-system and a management or decision making sub-system.

13. A management system in accordance with Claim 11 wherein said at least one sub-system for collecting at least one set of transportation data is configured to collect real-time data from said at least one sub-system.

5 14. A management system in accordance with Claim 13, wherein the transportation system includes at least one vehicle, said management system configured to alter a performance of at least one vehicle based upon the problem area data set.

10 15. A management system in accordance with Claim 14 wherein at least one sub-system is configured of continuously altering the performance of the vehicle based upon the real-time data.

16. A management system in accordance with Claim 11 wherein said at least one sub-system is configured to identify at least one source of delay.

17. A management system in accordance with Claim 16 wherein said at least one sub-system is further configured to identify a pre-defined quantity of largest source of delays.

18. A system comprising a plurality of sub-systems and a central data center, said system configured to:

collect at least one set of transportation data from at least one sub-system;

20 compare said collected transportation data set to at least one standard transportation data; and

generate at least one problem area data set based upon the comparison of the collected and standard data without human intervention.

25 19. A system in accordance with Claim 18 comprising at least one locomotive sub-system attached to a locomotive, each said locomotive sub-system

including a GPS receiver and a transceiver, said locomotive sub-system configured to determine a real-time absolute geographic position of the locomotive.

20. A system in accordance with Claim 18 further configured to determine a predicted locomotive delay based upon said problem area data.

add A3

add B2